

FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-7271
OLYMPIC VIEW SANITARY LANDFILL, Inc.

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-7271. The Department of Ecology (the Department) is proposing to issue this permit as a renewal of the existing permit ST-7271. The renewed permit will authorize discharge of waste water to the City of Bremerton POTW. This fact sheet contains an explanation of the nature of the discharge, the Department's decisions on limiting the pollutants in the waste water, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of waste water to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response.

GENERAL INFORMATION	
Applicant	Olympic View Sanitary Landfill, Inc. P.O. Box 990 Bremerton, WA 98337
Mailing Address	1316 Concannon Boulevard Livermore, CA 94550-6004
Facility Name and Location Address	Olympic View Sanitary Landfill 10015 SW Barney White Road Port Orchard, WA 98367
Type of Facility	Municipal Solid Waste Landfill
Facility Discharge Location	Latitude: 47° 31' 30" N Longitude: 122° 38' 00" W
Treatment Plant Receiving Discharge	City of Bremerton POTW (WA002928-9)
Contact at Facility	Name: Jeff Altman, Operations Manager Brem Air Disposal Telephone: (360) 415-2737
Responsible Official	Name: Marc Yalom, Sr., Project Manager Closed Sites Management Group Telephone: (925) 456-5369
Corporate Contact	Name: Dee Brncich, Vice President Closed Sites Management Group Telephone: (630) 572-2460

BACKGROUND INFORMATION

OPERATIONS AT THE CLOSED LANDFILL

The Olympic View Sanitary Landfill is a closed Subtitle D sanitary landfill under post closure operation and maintenance. The closed landfill is owned and operated by Olympic View Sanitary Landfill, Inc. (OVSL), a subsidiary of Waste Management, Inc. The facility stopped receiving solid wastes in 2003, and was capped and closed in 2004. The landfill site is located ten miles southwest of Bremerton (between Gorst and Belfair) off State Route 3, just west of the Bremerton National Airport, and adjacent to Port of Bremerton's Olympic View Industrial Park.

Operations at the site currently consist of post closure operation and maintenance, including the collection, pretreatment, and off-site disposal (at a municipal POTW) of landfill leachate. Leachate, which forms when liquids pass-through or are generated in a landfill, are collected using a series of collection lines, a gravity transmission line, a pump station and force main, a pretreatment storage lagoon, an evaporator unit, and a truck load-out station. Leachate is also generated from solid waste at the solid waste transfer station located opposite the site, across SW Barney White Road.

Pretreatment of the collected leachate occurs within a lined lagoon with a capacity of approximately 3.12 million gallons. The pretreatment train primarily consists of aeration and evaporation. The evaporator unit receives leachate influent from the lagoon. Landfill-generated methane is burned in the unit to turn the aqueous portion to steam. The generated steam is then discharged into a flare to polish the emissions to the atmosphere. Leachate evaporator unit residual liquid generated during pretreatment is returned to the lagoon.

Under post-closure operations, most of the generated leachate is evaporated. However, occasionally, excess pretreated wastewater from the lagoon is transferred into 6000-gallon hauling trucks for off-site discharge at the City of Bremerton POTW. These transfers typically occur during the latter half of the wet season (January to March) and consist of batch deliveries to the POTW that can accrue from 50,000 to over 400,000 gallons over a delivery period of several days.

HISTORY OF OPERATIONS AT THE LANDFILL

In the early 1960's solid waste disposal operations began at the facility, then known as the Old Barney White Landfill. The facility accepted US Navy, industrial, putrescible, and self-hauled municipal waste, and was operated as an open burning dump. When Brem Air Disposal, Inc., acquired the landfill in 1970, the name was changed to "Brem Air Northwest Disposal Facility." Brem Air Disposal discontinued burning of waste by 1972. By 1975, the company had developed the new landfill operations to comply with state regulations, the Minimal Functional Standards for Solid Waste Handling, and permit requirements imposed by Bremerton-Kitsap County Health District. At that time it began spreading, compacting, and applying cover to the solid waste. In 1975, Brem Air Disposal, Inc., shareholders formed a new corporation, Kitsap County Sanitary Landfill, Inc. (KCSL). KCSL continued to operate the landfill, although its name was changed in 1995 to Olympic View Sanitary Landfill, Inc. (OVSL). OVSL was purchased by Envirofil, Inc., on November 5, 1993. In 1994, Envirofil merged with USA Waste Services. Subsequently, in 1997, USA Waste Services merged with Waste Management, Inc., which now owns OVSL. The facility stopped receiving solid wastes in 2003, and was capped and closed in 2004.

Olympic View Sanitary Landfill site occupies 65 acres of a 500-acre parcel. The municipal solid waste landfill consists of three sections: an old unlined portion (the Old Barney White Landfill), the Phase I expansion, and the Phase II expansion.

The Old Barney White Landfill was closed in 1985 under the standards of Chapter 173-301 WAC. This portion of the landfill is unlined and has no internal leachate collection system. The final cover, constructed in 1985, consisted of a one-foot layer of sand and gravel, a 1.5-foot layer of low permeability soil, 2.5 feet of sludge-amended soil, and six inches of topsoil. A perimeter leachate interceptor (toe seep collector) and a passive gas collection system were also installed in 1985. The total volume of waste disposed of in this 25-acre area is estimated to be approximately 2.2 million cubic yards [907,000 metric tons of municipal solid waste (MSW)].

The old landfill closure was improved in 1991 and 1992. The improved closure consists of the original layer of low permeability soil overlain by a 50-mil geo-membrane [textured very low density polyethylene (VLDPE)] layer, a geo-net composite drainage layer, 1.5 feet of cover soil, and six inches of top soil. An active gas extraction system was also added at that time.

Phase I constitutes 20 acres and had an original estimated capacity of one million cubic yards. Phase I is divided into three stages. Stage A abuts the old disposal area, is lined, and is equipped with a leachate collection system.

The Stage A liner, which was constructed in 1985, consists of two feet of compacted soil on the bottom and a 36-mil Hypalon liner on the side slopes. This liner does not satisfy the design requirements of Chapter 173-304 WAC (the minimal functional standards). A portion of Stage 1A was closed in 1992/1993 with the improvement of the old landfill closure.

The Stage B liner, constructed in 1988, consists of two feet of compacted soil with a permeability of 10^{-6} cm/sec overlain by a 60-mil high density polyethylene geo-membrane.

The 20-acre Phase II expansion area is located directly north of Phase I. Its originally proposed capacity was 1.2 million cubic yards. A vertical expansion was approved for the Phase I and Phase II areas in 1991, which increased the combined capacity of Phase I and Phase II from 2.1 million cubic yards to 4.0 million cubic yards. Development of Phase II by stages began in the summer of 1996.

The following sequence has been utilized with respect to filling of each of the landfill cells:

- 1997 Phase II a1
- 1998 Phase II b1
- 1999 Phase II b2
- 2000 Phase II b3

Phase II b3 was the last of the active cells, prior to the cessation of receipt of solid wastes in 2003. Following closure of the landfill, a solid waste transfer station was constructed. Generation of leachate from the landfill continues after closure of the landfill, although at a reduced rate with respect to the time the landfill was in operation.

LEACHATE COLLECTION SYSTEM

Leachate is formed when liquids pass-through a landfill, removing contaminants and their degradation products from the solid waste. Decay and fermentation produce gases (for example, carbon dioxide and methane) and organic acids, resulting in the dissolution of chemical constituents such as iron and manganese from the waste. Landfills in western Washington may become partially or totally saturated by winter precipitation and, in unlined landfills, horizontal or upward flow of ground water. The rate or degree of saturation and the subsequent leachate production is based on site-specific conditions and landfill operations. The amount of leachate produced and the rate of production is a function of the bulk chemical composition, particle size and hydraulic conductivity of the refuse and the capacity of the cover and liner material to restrict infiltration of incident precipitation.

The leachate management system at Olympic View Sanitary Landfill includes leachate collection lines, a gravity transmission line, a pump station and force main, pretreatment/storage lagoons, and a truck load-out station.

The leachate collection system includes the toe seep collection system around the base of the old landfill and the drainage layer/leachate collection lines installed above the liner in the Phase I and Phase II expansion areas. Pumps with a capacity of 35-65 gpm have been lowered to the bottom of the risers. The leachate is pumped to an HDPE force main.

A gravity transmission line conveys the leachate from the leachate collection system to the leachate treatment/storage lagoons. This line is located along the north shoulder of the north perimeter road. There is a series of five manholes along this transmission line. A cutoff valve is provided at Manhole #1 to stop the flow from the Phase I expansion area.

Condensate is a wastewater which forms in the collection pipes of active gas extraction systems. Condensate from the active gas collection system at Olympic View Landfill is discharged into the leachate treatment/storage system at Olympic View.

LEACHATE TREATMENT PONDS

The leachate recovered is directed to the leachate treatment/collection lagoon, which is equipped with two aerators. The capacity of the pond is approximately 3.12 million gallons. The treatment/storage lagoon has a double composite liner system utilizing a 60-mil and 80-mil HDPE geo-membrane liner. Recent practice has been to operate the aerators several days per week, typically Monday through Friday in the summer. Operation of the aerators is adjusted in accordance with the BOD concentration in the ponds. A leachate polishing pond, located nearby the leachate treatment pond, has been abandoned.

The leachate truck load-out station is located adjacent to the lagoon. Prior to 1997, treated leachate from the treatment and storage system was in-hauled and discharged at the Port Orchard/Kitsap County Sewer District No. 5 Wastewater Treatment Plant. In 1997, the landfill began hauling leachate to the City of Bremerton POTW.

A leachate irrigation system, permitted in the permit issued in 1988, has been abandoned. The system consisted of a pump station, force main, system controller, and the irrigation sites. The pipe to the irrigation system has been capped at the pump station. The pump flow line was converted to a recirculating line, and all leachate discharges into lagoon #1.

Under post-closure conditions, most of the generated leachate is evaporated. However, occasionally, excess pretreated wastewater from the lagoon is transferred into 6000-gallon hauling trucks for off-site discharge at the City of Bremerton's POTW. These transfers typically occur during the latter half of the wet season (January to March), and consist of batch deliveries to the POTW that can accrue to between 50,000 to over 400,000 gallons over a delivery period of several days.

LEACHATE EVAPORATION OPERATIONS

Methane generated at the landfill is used to evaporate up to approximately 20,000 gallons of leachate per day. The evaporated leachate is passed through the flare prior to being vented to the atmosphere. The landfill receives a tax credit for utilization of the methane. The shutting down and capping of the landfill is expected to result in the reduced production of leachate, with respect to that experienced at the time the landfill was in operation. It is expected that, at some point, evaporation of the entirety of the leachate generated will be possible.

SUPPORT FACILITIES

Support facilities for the general operations of the landfill include:

- *Equipment Maintenance Shop:* The maintenance shop is located near the general office and is equipped with facilities to overhaul landfill machinery. Landfill equipment includes refuse compactors, tracked dozers and loader, dump truck, a road grader, and waste transfer roll-off truck (for on-site containers). The equipment is used for both placing waste and moving materials.
- *Employee Offices:* Former employee facilities are located adjacent to the Equipment Maintenance Shop. There are no employees regularly situated at Olympic View Sanitary Landfill now that the landfill is in post closure status.
- *Weigh Station:* A weigh station consisting of two truck scales and a scale house is used occasionally to check the tare weights of company vehicles.
- *Transfer Station:* Waste water from the drainage system at the newly constructed transfer station is discharged to the leachate storage and pretreatment lagoon. The transfer station drainage system accepts contact waste water from the tipping floor and compactor. The contact wastewater is collected in a 1,150-gallon below-ground reinforced concrete vault located below the compactor. The vault includes a two-chambered oil-water separator. When the level of liquid in the vault reaches 675 gallons, a pump is automatically activated, and the liquid is pumped to an above-ground storage tank located near the special waste/recyclables loading area. The pump is equipped with an alarm system that alerts the operator if the pump is not working. The above-ground storage tank is equipped with a mechanical level indicator. The above-ground tank is pumped on a periodic basis and transferred to the leachate storage and treatment system. The volume of this water is expected to be relatively insignificant, with an average rate of generation expected to be less than 100 gallons per day.

- *Landfill Gas Flare Station:* The landfill gas flare station is located west of the southwest corner of the Old Barney White Landfill. The station consists of the landfill gas flare, a leachate evaporation unit, ancillary equipment, and a contractor office trailer. Sanitary waste from the office trailer is stored in a tank for pickup by vacuum truck and is disposed of off-site.

STORMWATER MANAGEMENT

The existing stormwater control system is described in the Olympic View Sanitary Landfill Surface Water Management Plan (5/92). The system consists of a ditch and culvert conveyance system, detention ponds, and infiltration system, erosion control measures and grass lined swales for water quality control. The discharge of stormwater is authorized and regulated under Stormwater Baseline General Permit for Industrial Activity No. SO3-002538.

Stormwater incident to covered landfill areas is directed to settling ponds which are separate from the leachate lagoon. The storm water from the stormwater pond is monitored under a MTCA agreement (voluntary order). The storm water is discharged under the authorization of a General Stormwater Permit. The General Stormwater Permit requires preparation of both a Stormwater Pollution Prevention Plan and a Spill Prevention Plan.

DESCRIPTION OF CITY OF BREMERTON POTW

As of April 2006, the West Plant of the City of Bremerton Wastewater Treatment Plant consists of a conventional (complete mix) activated sludge-secondary treatment system. The liquid stream treatment system includes three mechanical bar screens, two aerated grit chambers, two primary clarifiers, a roughing biofilter (currently not in use), two aeration basins with fine bubble diffusers, two secondary clarifiers, two chlorine contact basins, and a sodium bisulfite dechlorination system.

The solids stream treatment system components at this plant include a gravity thickener (currently not in use), a dissolved air flotation thickener (DAFT), two anaerobic digesters, and a centrifuge.

Solids received from primary clarifiers are de-gritted in cyclone de-gritters and then thickened in a gravity thickener. The secondary sludge is thickened in a dissolved air flotation thickener (DAFT). The thickened primary and secondary sludges are digested in two anaerobic digesters operated as primary digesters.

The biosolids (digested sludge) is utilized at a city-owned forest application site. The recycle streams, which include gravity thickener supernatant, DAFT underflow and digester supernatant, are returned to the headworks for further treatment.

Treated, chlorinated (followed by dechlorination) effluent is discharged to Sinclair Inlet, an arm of Puget Sound. The effluent is discharged through a 36-inch diameter outfall pipe which extends 450 feet offshore and terminates with a 120-foot long diffuser. The 570-foot long outfall discharges into Sinclair Inlet at a location west of Puget Sound Naval Shipyard.

The approved design criteria for the facility (West Plant) are:

Average Flow for the maximum month:	10.1 mgd
Influent BOD ₅ loading for the maximum month:	18,100 lb/day
Influent TSS loading for the maximum month:	22,600 lb/day

The dilution ratio used in the chronic mixing zone was 62:1.

The dilution zone used in the acute mixing zone was 31:1 for ammonia, cadmium, chromium, cyanide, mercury, nickel, and selenium.

The sludge, which is anaerobically digested at the Bremerton plant, is utilized on permitted forest lands owned by the City.

At the time (April 2006) of the drafting of this permit for Olympic View Sanitary Landfill, recent PLUMES modeling indicated mixing ratios of 20:1 (acute) and 120:1 (chronic) for the West Plant. These limitations have not been incorporated into the NPDES permit for the City of Bremerton POTW yet.

The City of Bremerton also operates a plant designated as the East Plant, which is used as a backup plant during periods of unusually high wastewater flows.

PERMIT STATUS

Permit (ST-7271) authorizing discharge to POTW's from Olympic View Sanitary Landfill was issued on May 15, 1996, and expired May 15, 2001. This permit authorized discharge to the following two treatment plants:

- City of Port Orchard - Central Kitsap Sewer District 5 Treatment Plant
- Central Kitsap Treatment Plant

In addition, the facility was issued a temporary permit as evidenced by a letter issued by the Department on May 4, 1998. The temporary permit authorized discharge to the City of Bremerton under temporary Permit ST-7402. This permit was issued following issuance of a Notice of Violation and penalty for discharge to the City of Bremerton POTW without a State Waste Discharge Permit.

Permit ST-7271, which authorized discharge to the two small Kitsap County POTW's, expired on May 15, 2001. The authorization to discharge to the Kitsap County POTW's was not continued when Permit ST-7271 was renewed.

An application for renewal of Permit ST-7271 was submitted to the Department on May 14, 2001, and accepted by the Department on June 6, 2001. The permit application contained a request for authorization to discharge to the City of Bremerton. Permit ST-7271 (non-temporary) was issued to Olympic View Sanitary Landfill, Inc., on September 16, 2002, with an expiration date of June 30, 2006. This permit authorizes discharge of leachate to the City of Bremerton POTW, and replaces the authorization contained in temporary Permit ST-7402.

Six violations of BOD₅ standards and seven violations of TSS standards occurred during the period between September 1998 and July 2001.

Since October 1, 2002, when the existing permit became effective, the following violations have occurred:

Discharge Standards Violations of Permit ST-7271 October 1, 2002, through January 2006			
Month & Year of Violation	Parameter	Value Reported on DMR	Discharge Standard in Permit
December 2002	Flow, gallons per day	97425	90,000
February 2003	Flow, gallons per day	92382	90,000

The flow violations indicated in the table above were attributed to high precipitation.

The facility last received an inspection on June 28, 2001. At the time of the inspection, a sample was collected for metals and volatile organic compounds. The results indicated compliance with the metals limitations in the permit. The volatile organic compound assay was unremarkable for landfill leachate. Tetrahydrofuran (55 micrograms per liter) and 2-butanone (39 micrograms per liter) were the most abundant compounds identified. The assay of tentatively identified compounds did not indicate the presence of compounds at concentrations of environmental concern (2-butanol, dimethyl sulfide, 2,4 dimethyl-3-pentanone, and 1,3,3-trimethyl-bicyclo(2,2,1)-heptan-2-one were identified in trace amounts (i.e., less than 10 micrograms per liter).

The Department issued a Notice of Penalty to Olympic View Sanitary Landfill, Inc., on April 25, 2003, for a violation of the BOD₅ standard and a violation of the TSS standard. Both violations occurred in July 2001. The violation of the BOD₅ standard consisted of a discharge of 2700 mg/L BOD₅. The violation of the TSS standard consisted of a discharge of 2100 mg/L. The BOD₅ and TSS standards in the then-effective permit were 300 mg/L and 335 mg/L, respectively. The violation of the BOD₅ standard was due to insufficient operation of aerators.

An application for renewal of the Olympic View Sanitary Landfill permit was received on December 16, 2005. A letter to entity accepting the application was sent by the Department on December 19, 2005.

WASTEWATER CHARACTERIZATION

The characteristics of the effluent wastewater from Olympic View Sanitary Landfill are shown in the table below.

Olympic View Sanitary Landfill – Leachate Characteristics Based on the Period from March 2001 through January 2006¹			
Pollutant Parameter	Minimum	Maximum	Average
Flow, gpd	60,014	169,934	90,600
BOD₅, mg/L	30.5	2700	206
TSS, mg/L	17	1700	106
Copper, mg/L	0.006	0.028	0.014
Nickel, mg/L	0.081	0.29	0.134
Zinc, mg/L	0.021	0.11	0.049
Total Kjeldahl Nitrogen, mg/L	123	198	155
pH, maximum	7.9	8.8	8.2
pH, minimum	7.9	8.2	8.2
¹ The data for TKN is based on the period July 2001 through June 2002.			

SEPA COMPLIANCE

Olympic View Sanitary Landfill is a pre-existing site, with a pre-existing permit. Therefore, completion of an environmental checklist is not required.

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Waste water must be treated using all known, available and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110).

The limitations contained in the applicable federal categorical regulations are considered to be consistent, in most cases, with AKART requirements. The federal categorical limitations for the landfill category are set forth in 40 CFR Part 437. As Waste Management only seeks authorization to discharge process wastewater (leachate) from municipal solid waste to the City of Bremerton POTW, the landfill categorical limitations are not applicable to this site. In addition, the categorical limitations for Centralized Waste Treaters (40 CFR Part 437) which became effective on January 22, 2001, contain a specific exemption for landfills and transfer stations engaged in municipal solid waste-only operations.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect the City of Bremerton POTW from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, effluent limitations for certain parameters are necessary. Data indicates that the only pollutants which appear to have a potential for exceeding the permit limitations are copper, nickel, and zinc. Therefore, monitoring limitations for those three metals are included in the proposed permit.

Local Discharge Limitations Developed for the City of Bremerton POTW (revised 2001 for increased flow from landfill)	
Pollutant Parameter	Local Limitation
Cadmium, T (mg/L)	0.09
Chromium, T (mg/L)	3.2
Copper, T (mg/L)	2.6
Lead, T (mg/L)	0.65
Nickel, T (mg/L)	1.6
Silver, T (mg/L)	2.0
Zinc, T (mg/L)	3.4

Pollutant concentrations in the proposed discharge with technology-based controls in place are not expected to cause problems at the receiving POTW, such as interference, pass-through, or hazardous exposure to POTW workers, nor is it expected to result in unacceptable pollutant levels in the POTW's sludge.

BOD₅ LIMITATIONS

The existing permit contains a BOD₅ limitation of 400 mg/L and a TSS limitation of 425 mg/L. Waste Management requested in their letter of May 11, 2001, that Olympic View Sanitary Landfill's BOD₅ limitation be increased to 400 mg/L and their TSS limitation be increased to 425 mg/L. Olympic View Sanitary Landfill staff members have discussed the proposed increase in BOD₅ limitations with City of Bremerton staff members. Mr. Pat Coxon, of the City of Bremerton, sent a letter on May 10, 2001, agreeing that the BOD₅/TSS limitations could be increased to 400 mg/L and 425 mg/L, respectively. The permit issued September 16, 2002, contained those limitations.

The Department's POTW permit manager requested that a clause be placed in the permit to enable the City of Bremerton to request that the BOD loading be reduced, if necessary.

LEACHATE FLOW RATE

The applicant has applied for discharge at a maximum rate of 200,000 gallons per day. This is an increase over the 90,000 gallons per day authorized in the existing permit. An examination of recent discharge volume records indicates that with an occasional exception, this rate will be adequate for the renewal permit.

COMPARISON OF LIMITATIONS WITH THOSE IN THE EXISTING PERMIT

The table below displays limitations contained in the existing and the proposed permit.

Comparison of Limitations in Existing and Proposed Permits		
Pollutant Parameter	Limitation (Daily Maximum) in Existing Permit ST-7271	Limitation (Daily Maximum) in Proposed Permit ST-7271
Flow, gpd	90,000	200,000
BOD ₅ , mg/L	400	400
TSS, mg/L	425	425
pH, standard pH units	6.0 – 9.0	6.0 – 9.0
Copper, mg/L	2.6	2.6
Nickel, mg/L	1.6	1.6
Zinc, mg/L	3.4	3.4
TKN, mg/L	N/A	N/A

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Conditions S1 and S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Due to the low probability of metals limitation exceedances in the proposed permit, a sampling frequency of once per six months is deemed adequate for sampling of metals content of the effluent.

Monitoring for BOD and TSS is required on a basis of two times per month. This monitoring frequency was increased to this frequency when the existing permit was issued in 2003, due to high variability in concentration demonstrated for these parameters.

Monitoring for priority pollutants is being required on a quarterly basis in order to ensure that these parameters do not increase to the point of becoming an environmental concern.

OTHER PERMIT CONDITIONS

REPORTING AND RECORD KEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and record keeping requirements to prevent and control waste discharges [WAC 273-216-110 and 40 CFR 403.12 (e), (g), and (h)].

OPERATIONS AND MAINTENANCE

The proposed permit contains Condition S5 as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. In addition, the Permittee is required to maintain a pretreatment system operating plan.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC), and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste. However, as the solid waste aspects are handled under provisions of the Departments solid waste program, there is no provision for submittal of a Solid Waste Plan in this permit.

NONROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate waste water which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for nonroutine and

unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this waste water and opportunities for reuse, Ecology may authorize a direct discharge via the process wastewater outfall or through a stormwater outfall for clean water, require the waste water to be placed through the facilities wastewater treatment process or require the water to be reused.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under Section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan as necessary and submit the plan with any changes to the Department.

SLUG DISCHARGE CONTROL PLAN

The Department has determined that the Permittee has the potential for a batch discharge or a spill that could adversely affect the POTW. Therefore, maintenance of a current Slug Discharge Control Plan is required [40 CFR 403.8 (f)]. A slug discharge is defined as any discharge of a nonroutine, episodic nature, including, but not limited to an accidental spill or non-customary batch discharge.

STORMWATER POLLUTION PREVENTION PLAN

The Permittee is required, under its Baseline Stormwater General Permit (SO3-002538), to maintain a Stormwater Pollution Prevention Plan.

TREATMENT SYSTEM OPERATING PLAN

The permit requires that the Permittee periodically review its Treatment System Operating Plan, update it as necessary, and submit any modifications to the Department.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or

regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for a period of five (5) years, which will result in an expiration date occurring in calendar year 2011.

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page one of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

The Department published a Public Notice of Draft (PNOD) on June 21, 2006, in the *Bremerton Sun*, to inform the public that a draft permit and fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments were mailed to:

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008-5452

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30)-day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (425) 649-7025, or by writing to the address listed above.

APPENDIX B—GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in waste water. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect waste water.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)—Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅—Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling—A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling—A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be “time-composite” (collected at constant time intervals) or “flow-proportional” (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.)

Construction Activity—Clearing, grading, excavation, and any other activity which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

Continuous Monitoring—Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference—A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) [including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA], sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)—The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through—A discharge which exits the POTW into waters of the state in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of state water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User—A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges waste water meeting one or more of the following criteria:

- a. Exceeds 0.5 percent of treatment plant design capacity criteria and discharges <25,000 gallons per day.
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass-through or interference at the POTW (for example, facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)—A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)—

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N.
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up five percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a nonroutine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface waterbody, or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)—Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.